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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Enrique Musoll

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EXAMINER

CHOUDHURY, AZIZUL Q

ART UNIT

PAPER NUMBER

2145

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/935,446

Applicant(s)

MUSOLL, ENRIQUE

Examiner

Azizul Choudhury

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20, 22 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20, 22 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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***Detailed Action***

This office action is in response to the correspondence received on August 14, 2006.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- Claims 1 and 17 claims validating predicted information. It is unclear as to how predicted information is validated and what the predicted information is validated against.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20, 22 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Matic et al (US Pat No: 6,430,156), hereafter referred to as Matic.

1. With regards to claims 1, 9 and 17, Matic teaches a packet buffering system for predicatively processing data packets in a data packet network, the data packets associated with a plurality of data flows, the data flows from a plurality of protocols, the system comprising: at least one input port for receiving data packets from a plurality of sources (Input port is inherent since Matic's design is for use in a network system), wherein the received data packets arrive from the plurality of data flows, interspersed (Packets arrive out of order (p. 348, column 2, 1<sup>st</sup> paragraph, Matic)); at least one output port for sending out data packets to a plurality of destinations (Output port is inherent since Matic's design is for use in a network system); a packet predictor, coupled to said least one input port, for predicting information about a future packet in any one of the plurality of data flows based on history of previously received packets from the plurality of data flows, said history stored in a memory coupled to said packet predictor (Packets are recorded and it's information is used to predict traffic; Abstract and p. 348, 2<sup>nd</sup> column, 6<sup>th</sup> paragraph, Matic); a plurality of queues for storing packets received from said plurality of sources, and for storing said predicted information about said future packet (Matic's design stores packet information as input to the predictor; Abstract, Matic); direction logic, coupled to said packet predictor, for

generating a Packet ID for said future packet, wherein said Packet ID is stored in one of said plurality of queues; buffer logic, coupled to said packet predictor, for validating said predicted information about said future packet based on access to said memory; and a processing core, coupled to said plurality of queues, wherein if said buffer logic validates said predicted information, notification is made to said direction logic which passes said Packet ID for said future packet to said processing core to initiate speculative processing (Matic teaches id for the packet and storage of the packets within vectors. ID that is to be used by a computing system must inherently store the id. Section 3, p. 350, subsection A [Learning], Matic).

2. With regards to claims 2, 10, 18 and 19, Matic teaches the system wherein the data packet network is the Internet network (p. 348, section 1, 1<sup>st</sup> paragraph, Matic).
3. With regards to claims 3 and 11, Matic teaches the system wherein the packet predictor utilizes a history record periodically updated by the system, to generate predicted data (p. 348, Abstract, Matic).
4. With regards to claims 4 and 12, Matic teaches the system wherein the history record comprises characteristics of recently received data packets (p. 348, Abstract, Matic).

5. With regards to claims 5 and 13, Matic teaches the system wherein the history record further comprises results of past predictions (Section 5, p. 351, Matic).
6. With regards to claims 6 and 15, Matic teaches the system wherein said packet predictor predicts specific characteristics, comprising one or more of packet type, packet flow identification, sender information, destination information, and packet size for said future packet (Section 1, p. 348, 2<sup>nd</sup> column, 6<sup>th</sup> paragraph, Matic).
7. With regards to claims 7, Matic teaches the system comprising a packet router (Matic's design is used in a network such an Internet, such claimed feature is inherent (Section 1, Matic)).
8. With regards to claims 8 and 16, Matic teaches the system comprising a data server (Matic's design is used in a network such an Internet, such claimed feature is inherent (Section 1, Matic)).
9. With regards to claim 14, Matic teaches the packet predictor system wherein the history record is stored in a memory accessible to the system (Matic's design uses recorded/history information for predicting (Abstract, Matic). For a computing system to use data, it is inherent that such data must be stored).

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10. With regards to claim 20, Matic teaches the method comprising a step for maintaining a history of either or both of packets actually received and results of prior predictions (Abstract, Matic).

11. With regards to claims 22 and 24, Matic teaches the method wherein said step of processing is abandoned if it is determined not to agree with the real data once it arrives (Section 5, Matic).

### ***Remarks***

The amendment received on August 14, 2006 has been carefully examined but is not deemed fully persuasive. In lieu of the claim amendments one of the 112-type rejections has been withdrawn. However, the 112-type rejection concerning validating predicted information remains. It is unclear as to how predicted information is validated and what the predicted information is validated against. In the remarks the applicant refers to the claims stating, "buffer logic, coupled to said packet predictor, for accessing said memory and for validating said predicted information about said future packet based on said access to said memory." Based on this cited portion of the claim, it is evident that the packet predictor has access to a buffer/memory for validating predicted information based on the access to memory. While this makes it clear that the memory is accessed in the validation process, it is still unclear as to what the predicted information is being validated against. In addition, In lieu of the claim amendments, a new search has been performed and the current office action has been compiled.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC

  
JASON CARDONE  
SUPERVISORY PATENT EXAMINER